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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,590	06/29/2001	Janne Aaltonen	367.40294X00	5624

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EXAMINER

GESESSE, TILAHUN

ART UNIT PAPER NUMBER

2684

DATE MAILED: 06/10/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/893,590

**Applicant(s)**

AALTONEN ET AL.

**Examiner**

Tilahun B Gesesse

**Art Unit**

2684

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-41 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Kostreski et al (6,130,898).

As to claims 1, Kostreski discloses a broadcast system for delivering content to a terminal (column 9, line 55-column 10 line 36 and figure 4), including a plurality of transmitters (TX1-TX3), the transmission characteristics of which defined a network topology and a network controller (5) responsive to distribution of demand of specific

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content to determine an appropriate network topology by varying the transmission characteristics of at least one of the transmitters (column 10 lines 9-36, column 11, lines 1-45 and figures 4-5).

As to claim 2, Kostreski discloses signaling means providing information relating to the network topology for delivery to a terminal (column 9 line 54-column 10 line 45 and figure 4).

As to claims 3,21, Kostreski discloses the network controller (5) is operable to modify the topology to reduce the number of calls in an area to which the same content is being delivered (column 9,line 54-column 10, lines 20 and figure 4).

As to claim 4, 22, Kostreski discloses the network controller (5) is operable to modify the topology to increase the number of calls in an area to which the same content is being delivered (column 9,line 54-column 10, lines 20 and figure 4).

As to claim 5,24-26, Kostreski discloses transmitter delivering content to an area overlying at least the network topology determined by the controller (figures 4 and 5).

As to claim 6,23, Kostreski discloses the network controller (5) is operable modify topology to deliver, in at least one cell , the content being delivered by the further transmitter (either using relay network or using overlap cells column 9, line 54-column 11, lines 45 and figures 4 and 5).

As to claim 7, 27-31, Kostreski discloses at least two transmitters comprise the plurality of transmitters (figure 4).

As to claim 8,32-36, Kostreski discloses the transmitters characteristics are varying in respect of one or more of the following, namely frequency, antenna directivity or transmission power (column 11, lines 1-34 and figure 5).

As to claim 9, kostreski discloses a method of delivering content to terminals over a network whose topology is defined by the transmission characteristics of a plurality of transmitters (column 10, lines 43-column 11, line 44 and figures 5A and 5B) , comprising analyzing the content to be delivered together with its destination and varying the transmission characteristics (column 11 lines 1-45 and figures 5A and 5B). To explain, the primary area the radius of the 15 miles and secondary area 40 miles circle defined by the circle Ma indicating the maximum area and overlap cells takes advantage of choosing strongest reception frequency, where receiver of signals is weak due to topology barrier.

As to claims 10,38-40, kostreski discloses the transmitter characteristics are varied such that cellular density of the topology is reduced in an area where substantially the same content is being delivered to terminals (peak data usage, in business customers, occur in the daytime, but night time the business customers are be reduced and peak interactive video usage by residential customers occurs at night but daytime is reduce, (column 9, lines 65-67 and figure 4).

As to claim 11, Kostreski discloses the transmitter characteristics are varied such that cellular density of the topology is increased in an area where substantially the different content is being delivered to terminals (peak data usage, in business customers, occur in the daytime, but night time the business customers are be reduced

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and peak interactive video usage by residential customers occurs at night but daytime is reduce, (column 9, lines 65-67 and figure 4).

As to claims 12-13, 19-20 and 41, Kostreski inherently discloses a computer program comprising executable code for execution when loaded on a computer, the computer is operable in accordance with the code to carry out the method according and computer readable medium .

As to claims 14-18, Kostreski discloses a broadcast system (figure 4) having a plurality of transmitters (Tx1-TX3) for delivering content to terminals in respective locations each transmitter operating in accordance with a set of operational characteristics (column 11, lines 1-45) comprising: means for determining a distribution (5) of terminals for delivery of common content and means for varying the operational characteristics of a transmitter respective to the determined distribution of terminals (column 11, lines 1-45 and figures 4 and 5).

As to claims 37, Kostreski discloses the transmitter characteristics are varied such that the cellular density of the topology is increased in an area where substantially different content is being delivered to terminals (peak data usage, typical by business customers, occur in the daytime, and peak interactive video usage by residential customers occurs at night, column 9 lines 65-67 and column 10, lines 9-20 and figure 4).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rutledge et al (5,802,473) discloses a method of using the existing radio resources to automatically determine the current cellular topology is described (abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 703-308-5873. The examiner can normally be reached on flex.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TBG

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June 5, 2004

  
**TILAHUN GEBESSE**  
**PATENT EXAMINER**